

117th

# Annual Report

YEAR ENDING DECEMBER 31, 1949



BOSTON and MAINE RAILROAD

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#### **BOARD OF DIRECTORS 1949**

DIM ID D ALLEN *	TAMES CARRIELD
PHILIP R. ALLEN * Walpole, Mass.	JAMES GARFIELD Cambridge, Mass.
ROGER AMORY  Boston, Mass.	EDGAR C. HIRST  Concord, N. H.
LOUIS M. ATHERTON *° Swampscott, Mass.	HARVEY P. HOOD Brookline, Mass.
RICHARD L. BOWDITCH Cambridge, Mass.	ERNEST M. HOPKINS  Hanover, N. II.
HUGH J. CHISHOLM * Portland, Maine	AUGUSTUS P. LORING, JR. Beverly, Mass.
T. JEFFERSON COOLIDGE * Brookline, Mass.	JAMES L. MADDEN ‡  Danvers, Mass.
FAIRMAN R. DICK New York, N. Y.	JOHN R. McLANE *  Manchester, N. H.
BERNARD W. DOYLE † Leominster, Mass.	ROY L. PATRICK * Burlington, Vt.
HARRY H. DUDLEY  Concord, N. H.	PHILLIPS M. PAYSON Portland, Mc.
FREDERIC C. DUMAINE, JR.# Weston, Mass.	WILLIAM B. SKELTON Lewiston, Me.
EDWARD S. FRENCH * Springfield, Vt.	ROBERT W. STODDARD Worcester, Mass.
* Member Executive Committee # Resigned December 27, 1949 ° Died Februa	† Died December 26, 1949 ‡ Elected December 27, 1949 ary 24, 1950

#### OFFICERS—Effective January, 1950.

	President and Chairman of Executive Committee Assistant to President					E. S. FRENCH R. M. EDGAR
	Executive Vice President					T. G. SUGHRUE
	Vice President — Finance					W. S. TROWBRIDGE E. J. GALLAGHER
	Vice President — Purchases and Stores Purchasing Agent					A. W. MUNSTER H. M. RAINIE
	Vice President — Traffic					P. J. MULLANEY
	Vice President — Operations					F. W. ROURKE
	Vice President — Accounting					G. F. GLACY
	Vice President - On Leave of Absence					J. W. SMITH
	Chief Engineer					S. G. PHILLIPS C. S. ROBINSON
	General Counsel General Attorney General Attorney					J. B. SAWYER
ğ	Clerk of Corporation					W. J. BURNS



#### INTRODUCTION

In 1772 King George III granted a charter to Simeon Olcott authorizing the transportation of people and animals across the Connecticut River between Charlestown, N. H., and Springfield, Vt. Olcott's Ferry, later absorbed by the Cheshire Bridge Corporation when that enterprise was organized in 1804 for the purpose of building and operating a toll bridge in place of the ferry, was the first organized of a total of 178 separate corporations which eventually became the present Boston and Maine Railroad. The first to complete a railroad and place it in regular service was the Boston and Lowell, which was opened in 1835 over the 253/4 miles between the two cities from which it took its name.

Today the entire system, operating over 3,277 miles of track, serves the four northern New England states and a part of eastern New York. All of the predecessor companies are now integrated into one corporation except for three lines which are still being operated under leases.

During 1949 the Boston and Maine Railroad handled 18,701,832 tons of freight, serving the industries and people in its territory. The great diversity of its freight traffic is illustrated by the fact that except for coal and potatoes no single commodity accounted for more than  $3\frac{1}{2}\%$  of the total freight revenue.

Through its North Station in Boston, in 1949, 20,051,429 people passed to and from Boston and Maine trains. Of these passengers approximately 12,000,000 were commuters, ranking the Boston and Maine among the largest commutation lines in the United States.

An area rich in history, with great variety in its scenic beauty, northern New England is an ideal place to live and to work. The many skills of its people and its nearness to the greatest market area in the world continue to offer unexcelled advantages for industrial growth.



#### CONDENSED INCOME ACCOUNT FOR 1949

#### INCOME

iii comi			
	1949	Increase or Decrease from 1948	Per Cent
Operating Revenues	\$82,238,980 86	d \$11,926,947 26	12.67
Operating Expenses	67,091,572 50	d 6,650,776 72	9.02
Net Revenue from Operations	\$15,147,408 36	d \$ 5,276,170 54	25.83
Railway Tax Accruals	6,481,145 68	d 1,256,211 43	16.24
Railway Operating Income	\$ 8,666,262 68	d 8 4,019,959 11	31.69
Equipment and Joint Facility Rents — Net Dr	3,682,703 06	d 732,760 03	16.60
Net Railway Operating Income	\$ 4,983,559 62	d \$ 3,287,199 08	39.74
Other Income	980,546 99	12,054 02	1.24
Total Income	\$ 5,964,106 61	d \$ 3,275,145 06	35.45
			-

#### **DEDUCTIONS**

Rental Payments — Fixed	\$ 689,612	43	8	3,226	90	.47
Interest on Debt — Fixed	2,674,643	77	d	35,534	57	1.31
Interest on Unfunded Debt	14,227	42	d	13,845	78	49.32
Other Deductions	142,663	78		8,080	20	6.00
Total Deductions	\$ 3,521,147	40	d \$	38,073	25	1.07
Income After Fixed Charges	\$ 2,442,959	21	d 8	3,237,071	81	56.99

d Indicates decrease.

#### Income after Fixed Charges (Available Net Income)

has been allocated in accordance with Mortgage

Indentures to the following purposes:

Sinking Fund for Redemption of Series RR Bonds. . \$ 679,102 00

Interest on Income Bonds Series A:

Accrued for period, Jan. 1 to Dec. 31, 1949 at 41/2% 1,121,859 86 Sinking Fund for Redemption of Series A Bonds... 482,870 00

Total Mortgage Allocations..... \$ 2,283,831 86

Net Income transferred to Profit and Loss.... 159,127 35

8 2,442,959 21



#### TO THE OWNERS OF THE BOSTON AND MAINE RAILROAD:

The results of the operations of your company for the year 1949 show operating revenues of \$82,238,980.86 and operating expenses of \$67,091,572.50. Revenues were 12.7% below those of 1948 and operating expenses were reduced by 9.0% from the 1948 figures.

Income after fixed charges amounted to \$2,442,959.21 and after providing for contingent interest of \$1,121,859.86 and for sinking funds \$1,161,972.00 there was left a net of \$159,127.35.

#### STATUS OF CAPITAL STOCK REORGANIZATION

The number of shares of capital stock of all classes outstanding December 31, 1949, including fully paid negotiable receipts for subscriptions to prior preference stock, was unchanged at 1,046,113 of a par value of \$104,611,300.

The Plan for the modification of your company's capital stock structure which was approved by the Board of Directors on December 28, 1948, was the subject of a 5-day hearing in Boston before an Examiner of the Interstate Commerce Commission in March 1949. A number of representatives of shareholders were heard in favor of the Plan, as well as several, mostly representing holders of First Preferred stock, who appeared in opposition. On August 17, 1949 the Examiner submitted a report recommending to the Interstate Commerce Commission approval of the Plan as submitted by your Board of Directors. Argument on the Examiner's Report was held before the Commission on October 24, 1949, and the Commission at the end of the year had the case under advisement. It is expected that a final report in the matter will be rendered in the early part of 1950.

#### CHANGES IN LONG-TERM DEBT

Long-Term Debt outstanding in hands of Public on December 31, 1949 amounted to \$94,069,002.70 (see note), a decrease of \$2,670,089.99 since December 31, 1948.

#### DECREASE IN LONG-TERM DEBT

Funded Debt reacquired: Series RR 1st Mtge. 4% Bonds due		
7/1/60	\$1,309,800.00	
Series A Income Mtge. 4½% Bonds due		
7/1/70	1,272,500.00	
	\$2,582,300.00	
Assumption of liability of Vermont Valley		
Railroad 1st Mtge. 4% Bonds due		
10/1/55 in connection with acquisition		
of property of Vermont Valley Railroad	\$ 200,000,00	
Dec. 31, 1949	\$ 290,000.00	ea 202 200 00
Decrease Funded Debt in hands of Public		\$2,292,300.00
Decrease in Equipment Obligations ac-		
count installment payments during the	\$3,214,707.99	
year Increase in amount of Equipment Obliga-	φο,211,101.	
tions account new equipment received		
during the year	2,836,918.00	\$ 377,789.99
Net Decrease in Long-Term Debt in		
Hands of Public		\$2,670,089.99

Note—Long-Term Debt of \$94,069,002.70 is outstanding after deducting \$5,850,000.00 Bonds owned by the Railroad, of which \$661,000.00 is pledged with Old Colony Trust Company, Trustee, in lieu of Mortgaged Property Sold.

During the 10-year period ending December 31, 1949, outstanding funded debt, other than equipment obligations, was reduced by \$40,131,730. In addition, funded debt of leased lines, and obligations guaranteed by your company, were reduced by \$5,196,000, bringing the total system debt reduction since December 31, 1939, to \$45,327,730. The only leased line obligation presently outstanding consists of \$290,000 of Vermont Valley Railroad 4% bonds of an original issue of \$1,500,000.

Outstanding equipment obligations during the same period increased \$3,842,908.

Computed on an annual basis, total interest charges on debt outstanding December 31, 1949, including equipment obligations, were \$2,273,276 less than in the year ended December 31, 1939, a reduction of approximately 37.8%.

#### **TAXES**

Your company's total tax bill for 1949 showed a reduction of \$1,254,336.43 or 16.2% under 1948 as indicated in the tabulation below:

	1949	1948	Decrease	Percent Decrease
State and Municipal Taxes Federal Taxes Railroad Retirement (Em-	\$2,833,366.71	\$2,951,151.44	\$ 117,784.73	3.99
ployees' Pensions) Railroad Unemployment In-	2,547,100.88	2,647,682.64	100,581.76	3.80
surance	212,484.05	225,633.57	13,149.52	5.83
Income Taxes	862,971.92	1,884,385.58	\$1,021,413.66	54.20
Other Taxes (Excise Taxes, etc.)	38,122.12		1,406.76	
Total	\$6,494,045.68	\$7,748,382.11	\$1,254,336.43	16.19
Taxes Per Share of Stock	\$6.20	\$7.40		

The decrease in income tax was due to less taxable income earned. Railroad Retirement tax rates increased from  $5\frac{3}{4}\%$  to 6%, effective January 1, 1949, while Railroad Unemployment Insurance tax rates remained unchanged at  $\frac{1}{2}$  of 1%. Though there was a substantial total payroll reduction during the year the additional  $\frac{1}{4}$  of 1% increase in the Retirement tax as well as higher individual wages per employee offset to some extent the decrease that otherwise would have resulted from the payroll reduction.

Though real estate tax rates generally were higher in 1949, the sale of substantial parts of your company's waterfront properties to the Commonwealth of Massachusetts, and in several instances the lowering of assessments, resulted in a reduction in this item from the 1948 figure.

In addition to the taxes assessed directly against your company, acting as an unpaid collection agency it collected from others for the Federal Government in 1949 a total of \$10,038,270.41 in Excise, Withholding, and Retirement taxes.

The transportation excise taxes on freight and passenger traffic were levied not only as a war emergency measure for raising additional government revenue, but also as a deterrent to unnecessary shipments of goods and unnecessary traveling during the war. Their repeal now would have a stimulating effect on railroad earnings and it is hoped that Congress will enact the necessary repeal legislation during the current session.

#### RETURN ON INVESTMENT

The decrease in gross revenue referred to elsewhere in this report was only partly offset by reduced operating expenses. This resulted in a net railway operating income in 1949 of \$4,983,559 representing a return of only 2.0% on the \$254,040,311 invested in transportation property, 1.3% lower than in the previous year, as shown below:

	1949	1948	% Change to 1949	1939 to	Change 1949
Gross Revenue \$ Operating Expenses	82,238,981 67,091,573	\$ 94,165,928 73,742,349	The state of the s	46,341,082 33,133,913	77.40 102.49
Net Revenue	15,147,408	20,423,579	25.83	13,207,169	14.69
Railway tax Accruals . Equipment Rents Joint Facility Rents .	6,481,146 3,327,696 355,007	7,737,357 3,998,851 416,612	16.24 16.78 14.79	3,519,723 2,548,171 184,133	84.14 30.59 92.80
Deduction from Net Revenue	10,163,849	12,152,820	16.37	6,252,027	62.5
Net Railway Operating Income (A) \$	4,983,559	\$ 8,270,759	39.74 \$	6,955,142	28.3
Investment in Transportation Property including Cash, Material and Supplies, less Recorded Depreciation and	1949 \$254,040,3	311 \$2	1948 254,333,614		939 336,974
Amortization (B) Rate of Return = A ÷ B	2.0%		3.3%	2.	7%

The exact meaning of "return on investment" deserves re-emphasis. It is not the same thing as net profit, but is merely the ratio that net railway operating income bears to investment in transportation property.

Net railway operating income is what remains from gross revenues after taking out operating expenses, taxes and rents but before deducting fixed and contingent charges including interest on the company's bonds and other debts as well as provisions for sinking funds.

In other regulated public utilities a return of 6% on investment is considered reasonable. If railroads are to restore their credit with investors by paying an adequate return to the owners of the property, and if they are to continue to modernize and increase the efficiency of their operations, regulatory policies must permit the earning of a rate of return on investment at least equal to that enjoyed by other utilities.

#### FREIGHT TRAFFIC

Freight revenue for the year was \$61,721,865.97, or 12.9% less than that of 1948, which was the highest freight revenue in the company's history.

Revenue ton miles totaled 3,037,496,906 or 17.0% below 1948. Average revenue per ton mile was 2¢ or 4.9% above 1948. The reduction in freight revenue as well as in revenue ton miles was due to the general decline in industrial activity during the year. This condition was intensified by protracted strikes in the coal and steel industries and by a policy of reduced inventories on the part of many manufacturers.

The increase in average revenue per ton mile was principally due to the higher freight rate level which prevailed throughout the year. The railroads were authorized by the Interstate Commerce Commission to make an interim increase in freight rates effective January 11, 1949 in the form of an emergency charge, which in general increased freight rates 6% in the Northeast and between the Northeast and South, and 5% between the Northeast and West. Effective September 1, 1949, the Commission authorized the carriers to make this a permanent increase of 10% with certain exceptions, and maximum increases on some commodities.

In an endeavor to keep abreast of the almost constant increases in the cost of labor and material, the railroads have been obliged to seek permission from the Interstate Commerce Commission to increase freight



rates. In the cases of the last two increases, the decisions have been made a considerable time after the increases were asked for, with the result that freight rates have been increased at a time when both prices and general business activities were on the decline. This has increased the use of highway transportation, particularly contract and privately-owned trucks. There are no applications now pending before the Commission for further freight rate increases, and your company is now actively re-aligning its rates to improve its competitive position.

For some years it has been the general practice of railroads to give free pick-up-and-delivery service on less-than-carload freight. This work has been performed under contract, the cost of which has been very high during recent years, to the extent that the expense has become extremely burdensome. Effective November 5, 1949, your company and many other Eastern railroads discontinued the free pick-up-and-delivery service, and a charge is now assessed based substantially on the amounts paid to local truckmen for performing this service. On a volume of less-than-carload freight traffic equivalent to that of 1949 it is estimated that this should mean a reduction in expenses of approximately \$600,000 per year for your company.

#### PASSENGER TRAFFIC

Passenger revenue for the year was \$13,033,032.83, a decline of 12.3% from 1948. The number of passengers handled declined to 20,913,729 in 1949, as compared with 23,674,066 in 1948, a reduction of 11.7%. Passenger miles, an index of volume, declined 15.9%.

Commutation traffic for the year showed a total of 12,138,217 passengers, a decline of 3.4% in the number carried as against a decline of 21.0% in all other passengers carried. Part of the decline was due to a general lowering of industrial activity and part to curtailment of passenger trains in the elimination of unprofitable services.

During the year the eastern railroads petitioned for a general increase in passenger fares other than those applying to commutation travel and as a result of this they were authorized to increase the level of coach fares from 3¢ to 3.375¢ per mile and the first-class fares applicable in parlor and sleeping cars from 4¢ to 4.5¢ per mile. The increases generally were made effective December 1, 1949, but your company, together with other New England lines felt that to take full advantage of the increases would result in reduced rather than increased revenue.

Consequently, the one-way coach fares were increased as authorized, but a 30-day round-trip fare was provided on the old level and a one-day round-trip fare was made available at a lower rate than that previously in effect. Your company increased sleeping car fares as authorized, but made no increase in fares applicable to travel in parlor cars.

This fare adjustment has received much favorable comment, both in our territory and elsewhere, and it is felt that by providing these special round-trip fares the maximum revenue possible will be obtained.

#### **EXPRESS TRAFFIC**

The revenue from Express was \$653,052.68, a reduction of 44.6%. This resulted from a drop in the number of shipments handled, the general decline in business activity, competition of other forms of transportation, and the greater weights and sizes of packages now permitted in parcel post service. The Express Agency has had substantial increases in operating costs and the resultant decline in its net left a smaller amount available for payment to the participating rail carriers.

#### MILK TRAFFIC

Revenue from the transportation of milk and cream in 1949 was \$1,361,966.42, a decrease of 3.4% as compared with 1948. There were no changes in rates on this commodity during the year and the decrease in revenue was due to a smaller volume transported as a result of a drop in consumption.



#### PER DIEM DEVELOPMENTS IN 1949

It was stated in the Annual Report for 1948 that the case involving the proper per diem rate, the charge for rental of freight cars owned by other roads, had been submitted to the Interstate Commerce Commission for decision. On the one hand, certain railroads, including your company, attacked the rate then in effect of \$1.50 per car per day as being too high. On the other hand, certain other roads attacked the same rate as being too low.

On July 11, 1949 the Commission held that the \$1.50 rate was neither unreasonably high nor unreasonably low and dismissed both complaints. This action did not fix the rate for the future and subsequently, by vote of the roads owning a substantial majority of all freight cars, the rate was increased to \$1.75 per car per day effective November 1, 1949. Your company will continue its efforts to have this rate reduced. Since the Boston and Maine is a debit road, paying out considerably more in per diem charges to other roads than is collected from those roads for B. & M. cars when they are off line, the problem is an important one.

#### **GOVERNMENT REPARATIONS SUITS**

In the Annual Report for 1948, it was reported that the Department of Justice had filed complaints with the Interstate Commerce Commission seeking reparations for allegedly high rates charged the Government by the railroads during the war. Hearings on certain of the cases were held during 1949, and it is expected that additional complaints will be heard during 1950.

The railroads are prepared to prove that the Government enjoyed generally lower rates than commercial shippers during the War and that in contrast to a daily cost to the taxpayers of \$2,000,000 for government operations of the railroads during World War I, the railroads paid the equivalent of Two and a Half Million dollars per day in taxes to the Government during World War II, and that the return on investment to the industry between 1940 and 1945 averaged only 4.45%.

Although the reparations claims still have almost no support in public opinion, the Department of Justice continues to press them vigorously. If sucessful, the suits will result in very serious financial injury to the railroads.

#### RAILWAY MAIL PAY

In the early part of 1947 most of the railroads, including your company, petitioned the Interstate Commerce Commission for a 45% increase in the compensation received for carrying United States Mail. Subsequent amendments to the petition have raised the increase requested to 95% over the basis existing on January 1, 1947, a basis which had been unchanged for nearly 20 years.

Although the railroads receive only about two-thirds as much pay for carrying 94% of the first class mail as the airlines receive for carrying the remaining 6%, the Post Office Department has strenuously opposed any increase and has succeeded in delaying proceedings before the Commission to such an extent that although nearly three years have elapsed since the filing of the petition, a full hearing on the merits has not yet been completed.

When it became evident the delays would be serious the petitioning railroads requested an interim increase of 35%. On December 4, 1947, the Commission granted such an increase in the amount of 25%.

The petitioning roads have now requested a second interim increase of an additional 35% and it is expected that this will be acted upon by the Commission in the early part of 1950. Final decision in the proceedings appears to be at least a year away, and possibly longer, but if a favorable decision is rendered the increased rates will be retroactive to the dates of the petitions under which they were requested.

#### INDUSTRIAL DEVELOPMENT

Approximately \$14,000,000 was invested in thirty-four new or expanded plants in Boston and Maine territory during the year. Twenty-two new private sidings with a total length of 8760 feet of trackage were constructed and 650,000 square feet of Railroad-owned land was sold for industrial purposes.

Many concerns which deferred industrial development activities in 1949 are expected to proceed with their plans in 1950.

#### **ACQUISITIONS AND ABANDONMENTS**

Pursuant to the vote of the stockholders at the 1949 Annual Meeting appropriate steps were taken to acquire the property and franchises of the Vermont Valley Railroad and the Sullivan County Railroad, and acquisitions were completed as of December 31, 1949. In this connection your company has substituted a direct for an indirect obligation for the payment of the principal of and interest on \$290,000 in principal amount of First Mortgage 4% sinking fund bonds of the Vermont Valley Railroad, due October 1, 1955. Under a trackage agreement between the Vermont Valley Railroad and the Boston and Maine Railroad, your company was already obligated to make interest and sinking fund payments on those bonds, and consummation of this transaction in no way changed the essentials of the financial situation as it existed previously. Corporate simplification, however, was achieved.

As reported in the Annual Report to Stockholders for 1948, petition was made to the Massachusetts Department of Public Utilities for permission to abandon passenger service on the Saugus Branch. Despite evidence that the out-of-pocket costs of such service were two and a half times the revenue received therefrom, and despite showing that alternative means of public transportation were available, the Department of Public Utilities denied the petition on the ground that there was a substantial public demand for the service.

Through the year extensive studies of your company's operations revealed that a number of station agencies could be discontinued with considerable saving of expense, but without prospect of any considerable traffic losses. Studies have also shown that a number of branch line passenger trains were being operated at out-of-pocket costs in excess of revenues derived from the operation of the trains, constituting drains on system income.

A number of such discontinuances were accomplished during 1949, and a number of petitions for further discontinuances, both of agencies and of trains, were presented to and heard but not decided by the Public Service Commission of New Hampshire during the year. At the year's end further studies were being made and further petitions were in the course of preparation.

At the Annual Meeting of Stockholders held on April 13, 1949, authorization was given to sell approximately 45 miles of single track railroad between Rochester, N. H., and Westbrook, Me., to a newly formed company operating under the name of the Sanford and Eastern





Railroad. The sale was consummated and on July 1, 1949 the new owners took possession of the property. Cost studies had shown that the line had been operated at a deficit for years as part of a Class I Railroad. Operation by the Sanford and Eastern, a privately owned company, enables the industries located on the line to continue to have adequate service and the traffic which previously moved over your company's lines will continue so to move.

#### **OPERATING RESULTS**

Gross ton miles for the year 1949 were 12.5% less than 1948. This was primarily due to the lighter potato movement during the last quarter and the interruptions, because of labor disputes, in production in the coal mines and the steel mills. In spite of this, however, the average gross train load increased by 1.2% and the average freight train speed increased 3.9%, resulting in a gain in gross ton miles produced per train hour of 5.6% as compared with the previous year.

The proportion of gross ton miles handled by Diesel locomotives at the end of 1949 was 93.5% as compared with 87.3% at the end of 1948. This increase is important since the unit cost of coal in 1949 was up 6.2% over the previous year, while the price of Diesel fuel oil decreased 11.0%

Of the passenger train miles 54.4% were operated with Diesels in 1949 as compared with 40.5% in 1948. Most of the through trains are now Diesel operated and to some extent short runs are also operated by Diesel during the summer when train heat is not required, permitting the use of available spare freight Diesels for such service.

#### CHANGES IN EQUIPMENT

Steam locomotive ownership at the end of the year was 265. During 1949 thirty-five steam locomotives were retired.

Diesel locomotive ownership, totaling 141 units at the end of the year, is as follows:

											Owned 1/1/49	A	dded i 1949
Road Passenger	-2000	H.P									20		1
Road Freight	-3000	H.P							-		2		_
" "	-2700	H.P									27		_
11 11	-1500	H.P									5		13
**	-1350	H.P									15		_
Switcher	-1000	H.P									14		6
"	<b>—</b> 660												5
11	<b>—</b> 600	H.P						-			17		1
"	— 380	H.P									10		-
											116		26 *

One 2250 H.P. passenger locomotive was ordered for 1950 delivery. Revenue freight car ownership at the end of 1949 was 5,443. During the year 293 cars were retired because of age and condition, 6 were destroyed by accident on foreign lines, 11 were sold, and 81 converted to non-revenue service.

Left to right, 1000 H.P. Diesel Switcher; 1500 H.P. Branch Line Diesel; 1500 H.P. Road Switcher; 2000 H.P. Passenger Diesel; 2700 H.P. Freight Diesel at Boston Diesel Terminal.



The application of A.B. brakes which was ordered by the Interstate Commerce Commission for completion before January 1, 1950 has been extended to January 1, 1951. On December 31, 1949, 99.5% of your

company's interchange freight cars had been equipped.

Passenger car ownership at the end of the year was 1126. During the year 64 cars were withdrawn from service, most of them old steel underframe cars. Of these withdrawals 29 were scrapped, 27 were converted to non-revenue service, 7 were sold, and 1 was destroyed by accident on a foreign line. During the year 10 Pullman tourist cars were purchased from the War Assets Adminstration plus 2 combination cars from the Chesapeake and Ohio Railroad, all of which are to be converted to baggage cars.

Ownership of non-revenue equipment on December 31, 1948 was 939 cars. During the year 108 cars were converted from revenue equipment.

One gas crane and 3 small plows were purchased, 72 non-revenue cars were scrapped and 4 were sold.

#### WAGES AND WORKING RULES

The year 1949 was marked by considerable activity on the part of both operating and non-operating unions seeking higher wages, shorter hours and changes in working rules.

On March 19 a national agreement was signed giving non-operating employees an increase of 7¢ per hour, retroactive to October 1, 1948, and providing for a 40-hour week which became effective September 1, 1949.

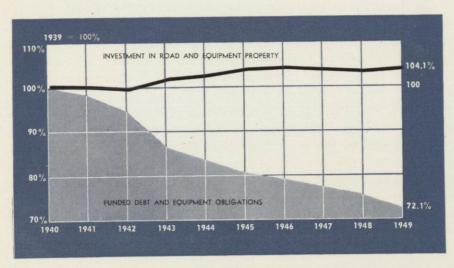
On April 11 an Emergency Board recommended rejection of the demand of the Brotherhood of Locomotive Engineers for a second engineer on Diesel locomotives. No further action has been taken in this matter. A demand of the Brotherhood of Locomotive Firemen and Enginemen for a second fireman on Diesels was also referred to an Emergency Board, which on September 19 recommended rejection of the demand. The Brotherhood declined to accept the recommendation of the Board and strike ballots are now before the men on a national basis.

At the end of the year there were also pending demands of the conductors and trainmen and of locomotive firemen for a 40-hour week for men in yard service, as well as changes in the rules applicable to road service. On December 15 the conductors and trainmen, following the customary practice when negotiations deadlock, sent out strike ballots nationally to enforce their demands. The engineers have served similar demands which are now pending.

#### ADDITIONS AND IMPROVEMENTS TO PROPERTY

Approximately 2900 tons of new 115-pound rail were laid during the year in 11.9 track miles in both tracks of the New Hampshire Division main line between Winter Hill and Winchester, Massachusetts. and in 1 track mile in the eastbound track of the Fitchburg Division main line near Greenfield, Massachusetts, with the balance used in renewal of 26 main line connections between Ayer and Greenfield. A total of 65 track miles of existing stone ballast was resurfaced, consisting of 38 miles on the Portland Division main line between Kennebunk and Rigby Yard, Maine, 15 miles at various locations on the Fitchburg Division main line, and 12 miles on the New Hampshire Division between Winter Hill and Winchester. A rail detector car, operated for the purpose of revealing internal rail defects, tested 1356 track miles of main lines and important branches. Double track was converted into single track over approximately 13 miles of the Troy Branch, between Troy and Johnsonville, New York, and for approximately 7 miles on the Fitchburg Division main line between Crescent and Scotia. New York. Modern centralized traffic control signal systems were installed in connection with both of these projects.

The construction of the new dam on the Connecticut River at Wilder, Vermont by the New England Power Company required extensive roadway changes in the main line between White River Junction and Wells River, Vermont. Track raising, culvert changes, and placement of over 5000 carloads of rip-rap for embankment protection were



made necessary by this project. The work is approximately 75% completed, and its cost is recollectible from the Power Company.

This year 4 grade crossings were eliminated by closing and 6 were eliminated by the construction of new overhead bridges. 45 grade crossings were eliminated by the sale of the line from Rochester, New Hampshire, to Westbrook, Maine to the Sanford and Eastern Railroad. 17 additional installations of automatic flashers and half gates were made, resulting in substantial savings over previous types of protection. Automatic flashers and bells were installed in 21 crossings, also with resultant savings over previous types of protection.

The passenger station facilities at Portsmouth, New Hampshire were modernized and rebuilt, resulting in one attractive station building, including a new restaurant, in place of three older buildings on the site. Improvement in parking facilities and general access to the station was made.

Many projects have been completed throughout the system with the object of modernizing and making more efficient facilities for handling traffic, including replacement of overhead power lines with underground cable in the Boston Terminal, improvement in yard lighting, with flood lights at Concord, New Hampshire and the west end of the eastbound yard at Mechanicville, New York and in addition, improvements in facilities were made at Billerica and Concord shops, as well as the Mechanicville and Somerville Diesel shops.

Policy of mechanizing all maintenance work possible continues as a part of constant improvement in plant and facilities.

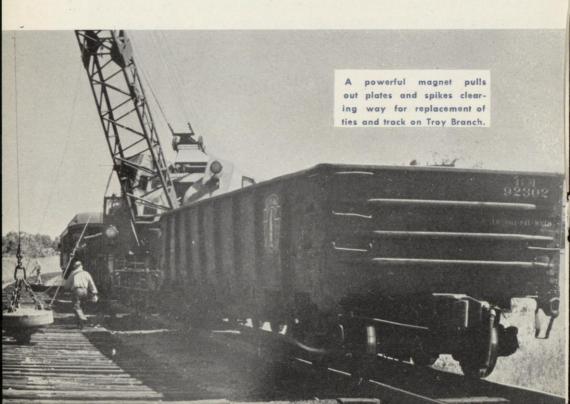
During the period of 10 years, net investment in "Road and Equipment Property" increased \$10,124,042 (from \$247,553,706 to \$257,677,748) and "Funded Debt and Equipment Obligations, in Hands of the Public" decreased \$36,288,822 (from \$130,067,825 to \$93,779,003). Funded Debt decreased \$40,131,730 and Equipment Obligations increased \$3,842,908.

#### MATERIALS AND SUPPLIES

In 1949 there were extended periods of suspension of work in the coal fields due to labor disputes. However, because of your company's increased use of Diesel power and consequent reduced demand for coal as a locomotive fuel, it was possible to obtain amounts of fair quality coal sufficient to meet requirements. Locomotive coal purchased amounted to 268,053 net tons at an average cost, f.o.b. B. & M. line, of \$7.90 per net ton. This compares with purchase of 443,000 net tons in 1948, at an average cost of \$7.76 per net ton.

Diesel fuel oil of high quality was available in ample supply throughout the year because of the mild weather during the first and last quarters of 1949. Diesel fuel oil purchased for use totaled 20,970,053 gallons, at an average cost of 8.96¢ per gallon, as compared with 20,925,535 gallons purchased at an average price of 10.12¢ per gallon in 1948.

The total cost of all materials and supplies purchased including fuel oil and locomotive coal, but excluding equipment purchases, was 23.9% less than in 1948. Total purchases in 1949 amounted to \$11,845,228 as compared with \$15,566,377 in 1948.



#### HOOSAC AND MYSTIC DOCKS

In the 1947 and 1948 Annual Reports mention was made of the program of the Commonwealth of Massachusetts to develop the port facilities of Boston. Such program contemplated the acquisition from this company of its Hoosac and Mystic Docks and of the Hoosac Grain Elevator, the reconstruction of said properties to modernize the port facilities and the leasing of the modernized facilities to the company for operation. The modern pier facilities of Hoosac Docks are rapidly nearing completion and the Grain Elevator has been improved by the installation of new machinery. It is expected that by the middle of 1950, your company will operate those properties as lessee.

The Board records, with sorrow, the death on December 26, 1949, of Bernard W. Doyle, and on February 24, 1950, of Louis M. Atherton. Mr. Doyle was elected to the Board on February 27, 1945, and Mr. Atherton on April 14, 1926. Both had served the Railroad and their respective communities with honor and distinction, and their deaths constitute a severe and unfortunate loss.

The continuing cooperation of your company's customers, and the willing efforts of officers and employees alike to retain the good will of shippers and passengers, as well as to operate the Railroad in the best interests of its owners, is gratefully acknowledged.

For the Board of Directors

President

Boston, Massachusetts, March 15, 1950.

	Dec. 31, 1949	Dec. 31, 1948
ROAD AND EQUIPMENT Investment in Road	\$191,268,443 75 62,341,673 69	\$184,329,586 50 61,429,617 14
Total Improvements on Leased Property Acquisition Adjustment Donations and Grants	\$253,610,117 44 10,020,595 84 c 5,952,965 13 c 53,484 58	\$245,759,203 64 13,474,684 88 c 5,518,025 98 c 72,455 79
Total Investment in Transportation Property .	\$257,624,263 57	\$253,643,406 75
Accrued Depreciation — Road and Equipment Accrued Amortization of Defense Projects — Road	c 21,319,623 07	c 21,285,444 84
and Equipment	c 10,646,169 63	c 10,636,540 75
Investment in Transportation Property less Recorded Depreciation and Amortization	\$225,658,470 87	\$221,721,421 16
Sinking Funds	1,679 32	1,217 12
Capital and Other Reserve Funds	1,025,724 02	814,409 37
Miscellaneous Physical Property	408,688 26 2,842,638 82	400,417 82 6,885,631 73
Other Investments	347,917 38	17,501 00
Total Investments	\$230,285,118 67	\$229,840,598 20
CURRENT ASSETS		
Cash	\$ 6,823,980 81	\$ 7,567,397 30
Cash in Transit — Agents' Remittances	845,034 44	791,423 41
Temporary Cash Investments	8,015,000 00 2,204,238 03	8,015,000 00 2,291,765 75
Loans and Bills Receivable	2,204,230 03	23,526 97
Net Balance Receivable from Agents and Conductors	1,747,155 85	1,788,774 05
Miscellaneous Accounts Receivable	2,960,018 06	3,585,439 30
Material and Supplies	5,056,082 39 124,672 89	5,633,695 41 170,391 77
Accrued Accounts Receivable	522,412 07	1,003,681 18
Other Current Assets	79,799 03	93,017 55
Total Current Assets	\$ 28,378,393 57	\$ 30,964,112 69
DEFERRED ASSETS		
Working Fund Advances	\$ 17,581 09	\$ 17,253 09
Insurance and Other Funds	1,819,456 56 270,504 00	1,791,977 12 288,056 96
	270,304 00	200,030 90
Total Deferred Assets	\$ 2,107,541 65	\$ 2,097,287 17
UNADJUSTED DEBITS		
Prepayments . Discount on Funded Debt . Property Retired Chargeable to Operating Expenses	\$ 225,775 16 373,020 91	\$ 170,523 62 409,841 33
Property Retired Chargeable to Operating Expenses	942,789 23	409,041 33
Other Unadjusted Debits	484,782 03	650,505 25
Securities Issued or Assumed — Unpledged	5,453,000 00	3,697,700 00
Total Unadjusted Debits	\$ 7,479,367 33	\$ 4,928,570 20
Grand Total	\$268,250,421 22	\$267,830,568 26

c Indicates Credit Balance.

#### Liabilities

	Dec. 31, 1949	Dec. 31, 1948
CAPITAL STOCK Common Stock — 395,051 shares Preferred Stock — 31,498 shares First Preferred Stock — 388,179 shares Prior Preference Stock (Includes Negotiable Receipts).	\$ 39,505,100 00 3,149,800 00 38,817,900 00 23,138,500 00	\$ 39,505,100 00 3,149,800 00 38,817,900 00 23,138,500 00
Total Capital Stock	(a) \$104,611,300 00 4,227,040 14	(a) \$104,611,300 00 4,227,040 14
Total Capital Stock and Premiums	\$108,838,340 14	\$108,838,340 14
Stock Liability for Conversion	\$ 1,200 00	\$ 1,200 00
LONG-TERM DEBT Funded Debt Unmatured	(b) \$ 89,482,900 00 10,436,102 70	\$ 90,019,900 00 10,813,892 69
Total Long-Term Debt	\$ 99,919,002 70	\$100,833,792 69
CURRENT LIABILITIES Traffic and Car Service Balances — Net Payable. Audited Accounts and Wages Payable. Miscellaneous Accounts Payable Interest Matured Unpaid Dividends Matured Unpaid Unmatured Interest Accrued Accrued Accounts Payable. Taxes Accrued Other Current Liabilities	\$ 3,965,178 36 3,137,475 67 2,065,335 06 1,256,867 13 15,801 20 1,206,654 39 1,109,059 87 3,498,231 96 58,469 22	\$ 3,560,295 65 3,221,559 62 1,768,526 53 1,280,750 33 15,831 70 1,257,746 99 1,647,622 60 4,038,028 78 51,341 29
Total Current Liabilities	\$ 16,313,072 86	\$ 16,841,703 49
DEFERRED LIABILITIES New York State E.G.C. Projects Other Deferred Liabilities	\$ 324,212 52 101,909 59	\$ 332,786 23 91,770 97
Total Deferred Liabilities	\$ 426,122 11	\$ 424,557 20
UNADJUSTED CREDITS Insurance Reserves Accrued Depreciation — Leased Property Other Unadjusted Credits	\$ 50,000 00 113,898 61 289,194 98	347,348 29
Total Unadjusted Credits	\$ 453,093 59	\$ 1,032,883 19
SURPLUS Additions to Property through Income and Surplus Funded Debt Retired through Income and Surplus Sinking Fund Reserves Miscellaneous Fund Reserves Appropriated Surplus — Purchase of Leased Line Bonds.	\$ 14,822,146 85 19,861,020 66 484,606 10 1,137,387 25 357,000 00	19,182,100 44 1,554 32 1,061,089 31
Total Appropriated Surplus Unearned Surplus Earned Surplus	\$ 36,662,160 86 598,088 04 (c) 5,039,340 92	598,088 04
Total Surplus	\$ 42,299,589 82	\$ 39,858,091 55
Grand Total	\$268,250,421 22	\$267,830,568 26

<sup>(</sup>a) Includes \$264,000.00 held by or for Company.
(b) Includes \$5,850,000.00 held by or for Company.
(c) Includes Surplus Earned by Lessor Companies before Consolidation.

### Income Account

	Year ended	Increase or	Per
	Dec. 31, 1949	Decrease	Cent
TRANSPORTATION REVENUE	Dec. 51, 1747	Decrease	Cent
English t	AC1 701 007 07	0 0 11 2 010 10	
Freight	\$61,721,865 97	d\$ 9,115,010 40	12.87
Passenger	13,033,032 83	d 1,830,639 45	12.32
Baggage	16,992 46	d 1,357 07	7.40
Parlor and Chair Car	38,591 10	d 14,520 84	27.34
Mail			
Mail	2,271,908 16	256,829 98	12.75
Express	653,052 68	d 524,767 12	44.55
Other Passenger-Train	301,039 31	d 5,151 58	1.68
Milk	1,361,966 42	d 47,148 38	3.35
Switching	729,567 92	d 100,015 63	
Switching	129,301 92	d 100,015 05	12.06
T . 1 T			
Total Transportation			
Revenue	\$80,128,016 85	d\$11,381,780 49	12.44
INCIDENTAL REVENUE			
	A 120 (70 22	0 444,000:00	10.00
Dining and Buffet	\$ 129,670 32	d\$ 114,000 29	46.78
Station and Train Privileges	144,082 25	d 18,334 04	11.29
Parcel Room	20,628 82	d 7,211 33	25.90
Storage — Freight	44,244 47	d 32,302 09	
Storage — Freight Storage — Baggage			42.20
Storage — baggage	5,012 99	d 531 04	9.58
Demurrage	206,109 65	d 240,120 46	53.81
Telegraph and Telephone	30,930 44	d 2,063 99	6.26
Grain Elevators	42,083 47	3,810 07	9.95
Power	71,732 34		
Ponts of Puilding and Out	11,132 34	d 188 89	. 26
Rents of Buildings and Other			
Property	914,714 23	d 155,940 48	14.56
Miscellaneous	288,850 60	8,320 32	2.97
			4
Total Incidental Revenue.	\$ 1,898,059 58	.0 550 500 00	00 71
1 oldi Incideniai Revenue.	\$ 1,090,039 30	d\$ 558,562 22	22.74
I F			
Joint Facility — Cr	\$ 218,377 31	\$ 12,356 48	6.00
Joint Facility — Cr Joint Facility — Dr	5,472 88	d 1,038 97	15.96
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Total Joint Facility			
Observation Positive	0 212 004 42	0 42 205 45	
Operating Revenue	\$ 212,904 43	\$ 13,395 45	6.71
Total Operating Revenues	\$82,238,980 86	d\$11,926,947 26	12.67
OPERATING EXPENSES			
		The state of the s	
Maintenance of Way and			
Structures	\$13,676,003 08	d\$ 1,929,028 90	12.36
Maintenance of Equipment .	12,809,547 96	d 1,439,033 84	10.10
Traffic	1,253,135 63	0.000.00	
Transportation	25 744 052 12		. 66
Transportation	35,744,052 12	d 3,221,303 95	8.27
Miscellaneous Operations	216,654 79	d 122,774 30	36.17
General	3,392,178 92	69,686 49	2.10
Total Operating Expenses	\$67,091,572 50	d\$ 6,650,776 72	0.00
Operating Ratio			9.02
Operating Ratio	(81.58%)	(3.27%)	
Net Operating Revenue .	\$15,147,408 36	d\$ 5,276,170 54	25.83

### Income Account (Continued)

	Year ended Dec. 31, 1949	Increase or Decrease	Per Cent
TAX ACCRUALS	\$6,481,145 68	d\$1,256,211 43	16:24
Operating Income	\$8,666,262 68	d\$4,019,959 11	31.69
Rent from Locomotives Rent from Passenger-Train Cars Rent from Work Equipment . Joint Facility Rent Income	\$ 31,835 74 522,505 20 72,799 85 385,931 57	d\$ 1,593 84 d 21,178 92 57,509 79 33,756 20	4.77 3.90 376.13 9.59
Total Rent Income	\$1,013,072 36	\$ 68,493 23	7.25
Hire of Freight Cars — Debit Balance Rent for Locomotives Rent for Passenger-Train Cars . Rent for Work Equipment Joint Facility Rents	\$3,364,364 98 1,960 86 588,218 15 292 46 740,938 97	d\$ 486,297 38 161 20 d 149,211 17 d 1,070 76 d 27,848 69	12.63 8.96 20.23 78.55 3.62
Total Rents Payable	\$4,695,775 42	d\$ 664,266 80	12.39
Net Rents Payable	\$3,682,703 06	d\$ 732,760 03	16.60
Net Railway Operating Income	\$4,983,559 62	d\$3,287,199 08	39.74
OTHER INCOME Income from Lease of Road and Equipment Miscellaneous Rent Income Miscellaneous Nonoperating Physical Property Dividend Income Income from Funded Securities Income from Unfunded Securities and Accounts Income from Sinking and Other Reserve Funds Miscellaneous Income  Total Other Income	\$ 1,783 44 455,764 80 11,843 00 10,725 50 242,670 76 123,668 69 85,058 72 49,032 08 \$ 980,546 99	d\$ 216 56 d 5,037 82  d 50 22 2,372 50 d 27,088 53 33,778 23 7,557 72 738 70  \$ 12,054 02	10.83 1.09 .42 28.40 10.04 37.58 9.75 1.53 1.24
Total Income	\$5,964,106 61	d\$3,275,145 06	35.45

### Income Account (Concluded)

	Year ended Dec. 31, 1949	Increase or Decrease	Per Cent
MISCELLANEOUS DEDUCTIONS FROM INCOME Miscellaneous Rents Miscellaneous Tax Accruals Miscellaneous Income Charges Income Applied to Sinking and Other Reserve Funds	\$ 11,663 35 12,900 00 20,961 99 80,865 50	\$ 3,226 90 1,875 00 2,533 53 4,739 50	38.25 17.01 13.75 6.23
Total Miscellaneous Deductions	\$ 126,390 84	\$ 12,374 93	10.85
Income Available for Fixed Charges	\$5,837,715 77	a\$3,287,519 99	36.03
Fixed Charges Rent for Leased Roads Interest on Funded Debt — Fixed Interest Interest on Unfunded Debt . Amortization of Discount on Funded Debt	\$ 677,949 08 2,674,643 77 14,227 42 27,936 29	d\$ 35,534 57 d 13,845 78	1.31 49.32 3.68
Total Fixed Charges	\$3,394,756 56	d\$ 50,448 18	1.46
Income after Fixed Charges (Available Net Income)	\$2,442,959 21	d\$3,237,071 81	56.99
CONTINGENT CHARGES Sinking Fund — Series RR Bonds Interest on Funded Debt — Contingent Interest Sinking Fund — Series A Bonds .	\$ 679,102 00 1,121,859 86 482,870 00	d\$ 53,787 52	
Total Contingent Charges .	\$2,283,831 86	d\$ 53,787 52	
Net Income after Fixed Charges and Other De- ductions, transferred to Profit and Loss	\$ 159,127 35	d\$3,183,284 29	

d Indicates decrease.

### Earned Surplus - December 31, 1949

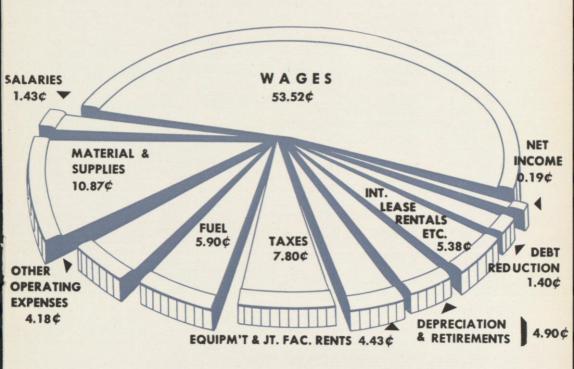
	Item	Debit	Credit
. ]	Balance, December 31, 1948 (Credit) Credit Balance from Income Account for		(a) \$3,836,112 59
	year 1949		159,127 35
	Railroad Bonds purchased during 1949 Profit on Retired Miscellaneous Property		954,275 20
	Sold		77,249 70
	Miscellaneous Credits — Net		12,576 08
(	Credit Balance, December 31, 1949	(a) \$5,039,340 92	
		\$5,039,340 92	\$5,039,340 92

<sup>(</sup>a) Includes Surplus Earned by Lessor Companies before Consolidation.

#### DISTRIBUTION OF THE INCOME DOLLAR - 1949

Average No. of employees, 13,209

Total payroll — all services, \$47,670,683.



### Operating Expenses

	Year ended Dec. 31, 1949	Increase or Decrease
MAINTENANCE OF WAY AND STRUCTURES		
Superintendence	\$ 872,744 13	\$ 13,153 28
Roadway Maintenance	1,056,377 23	d 56,837 49
Tunnels and Subways	49,367 84	10,039 36
Bridges, Trestles and Culverts	296,502 94	d 65,328 51
Ties	485,848 17	d 85,410 27
Rails	253,899 24	192,095 03
Other Track Material	448,993 13	135,946 90
Ballast.	95,600 96	d 31,204 63
Track Laying and Surfacing	3,382,355 51	d 245,172 81
Fences, Snowsheds and Signs	109,932 71	6,858 20
Station and Office Buildings	678,691 28	d 29,599 58
Roadway Buildings	56,003 20	d 752 95
Water Stations	42,876 44	d 18,292 68
Fuel Stations	65,900 90	405 76
Shops and Enginehouses	496,000 38	d 21,507 75
Grain Elevators	11,917 58	d 508 80
Storage Warehouses	383 65	d 4,609 44
Wharves and Docks	18,535 04	d 21,389 50
Coal and Ore Wharves	45,366 02	5,157 17
Telegraph and Telephone Lines	70,035 09	d 18,134 06
Signals and Interlockers	909,676 56	d 210,882 59
Power Plants	12,255 63	5,586 16
Power-Transmission Systems	45,936 42	d 8,577 55
Miscellaneous Structures	250 43	118 64
Road Property — Depreciation	1,640,367 96	d 14,054 00
Retirements — Road	621,197 63	346,749 36
Roadway Machines	160,054 64	d 21,268 77
Dismantling Retired Road Property .	128,207 69	80,930 62
Small Tools and Supplies	204,976 94	d 27,038 03
Removing Snow, Ice and Sand	591,122 15	d 1,706,010 05
Public Improvements — Maintenance	269,983 96	d 2,781 27
Injuries to Persons	78,092 04	d 2,333 63
Insurance	20,157 55	d 7,108 04
Stationery and Printing	14,084 32	d 74 37
Other Expenses	2,103 28	d 26,002 43
Maintaining Joint Tracks, Yards and		
Other Facilities — Dr	543,730 02	d 73,975 46
Maintaining Joint Tracks, Yards and		
Other Facilities — Cr	103,525 58	27,214 72
Total Maintenance of Was and		
Total Maintenance of Way and Structures	\$13,676,003 08	d \$1,929,028 90
Ratio to Total Operating Revenues	(16.63%)	(.06%)
Rano to Total Operating Revenues	(10.00/6)	(.0070)

d Indicates decrease.

### Operating Expenses (Continued)

	Year ended	Increase or	
	Dec. 31, 1949	Decrease	
MAINTENANCE OF EQUIPMENT			
Superintendence	\$ 652,704 11	\$ 10,255 60	)
Shop Machinery	233,883 11	d 94,223 94	4
Power-Plant Machinery	57,933 27	d 22,842 93	
Shop and Power-Plant Machinery —			
Depreciation	102,033 00	585 00	0
Dismantling Retired Shop and Power-			
Plant Machinery	194 96	d 2,118 11	1
Steam Locomotives — Repairs	2,178,210 72	d 1,599,665 58	
Other Locomotives — Repairs	2,025,427 67	162,017 70	
Freight-Train Cars — Repairs	2,289,879 50	d 59,610 63	
Passenger-Train Cars — Repairs	2,786,872 82	31,960 32	
Work Equipment — Repairs	307,033 80	d 74,382 58	
Miscellaneous Equipment — Repairs	8,556 22	d 9,917 48	
Dismantling Retired Equipment	50,431 76	7,393 49	
	30,431 70	650 00	
Retirements — Equipment	1,689,188 70	103,065 99	
Equipment — Depreciation	1,009,100 10	103,003 9	9
Equipment — Amortization of De-	25,756 88	44 00	0
fense Projects		11,531 44	
Injuries to Persons	88,840 57		
Insurance	85,746 75	26,333 11	
Stationery and Printing	10,256 55	d 1,010 16	
Other Expenses	71,268 14	47,159 8	1
Joint Maintenance of Equipment	152 102 (4	24.000 4	
Expenses — Dr	153,183 64	24,980 40	0
Joint Maintenance of Equipment	7.054.04	1 220 4	0
Expenses — Cr	7,854 21	1,239 40	U
T. 1.11	012 000 517 06	. 01 100 000 0	,
Total Maintenance of Equipment.	\$12,809,547 96	d \$1,439,033 84	4
Ratio to Total Operating Revenues	(15.58%)	(.45%)	
T-			Till 3
TRAFFIC	0 500 540 40	0 15 021 0	2
Superintendence	\$ 500,540 10	\$ 15,231 2.	
Outside Agencies	417,428 52	7,906 90	
Advertising	206,307 78	d 31,025 76	
Traffic Associations	57,218 17	557 3	
Industrial and Immigration Bureaus.	19,565 60	729 3	
Insurance	97 78	47 7	
Insurance	51,977 68	d 1,769 00	0
Total Traffic	\$ 1,253,135 63	d \$ 8,322 2	2
Ratio to Total Operating Revenues	(1.52%)	(.18%)	7
Tand to I out Operating Revenues	(1.02/0)	(.25/0)	

d Indicates decrease.

### Operating Expenses (Continued)

	Year ended Dec. 31, 1949	Increase or Decrease
TRANSPORTATION		
Superintendence	\$ 914,677 95	\$ 12,426 64
Dispatching Trains	346,202 93	20,119 18
Station Employees	5,739,861 64	d 516,546 32
Weighing, Inspection and Demurrage		
Bureaus	36,397 11	2,472 95
Station Supplies and Expenses	536,572 76	d 53,142 81
Yardmasters and Yard Clerks	1,153,606 39	
Yard Conductors and Brakemen		
Yard Switch and Signal Tenders	2,083,245 43	d 221,199 76
Vard Enginemen	395,275 70	21,398 32
Yard Enginemen	335,463 85	d 339,584 69
Yard Motormen	892,594 60	210,144 14
Yard Switching Fuel	450,973 76	d 211,722 45
Water for Yard Locomotives	10,887 64	d 2,632 03
Lubricants for Yard Locomotives	26,353 16	1,237 81
Other Supplies for Yard Locomotives	15,569 46	d 5,116 42
Enginehouse Expenses — Yard	226,569 19	d 61,342 36
Yard Supplies and Expenses	75,276 94	d 13,725 43
Operating Joint Yards and Terminals		
— Dr	2,446,063 79	d 75,268 18
Operating Joint Yards and Terminals	2,110,000 17	10,200 10
— Cr	411,283 92	7,628 72
Train Enginemen	1,541,712 67	0NO 110 10
Train Motormen		
Train Fuel	1,903,106 45	460,760 92
Train Power Purchased	3,777,217 88	d 1,007,845 26
Water for Train I	40,000 00	40,000 00
Water for Train Locomotives	87,320 46	d 39,478 50
Lubricants for Train Locomotives	202,661 82	d 14,472 10
Other Supplies for Train Locomotives	116,177 62	d 12,521 66
Enginehouse Expenses — Train	1,733,191 22	d 99,613 66
Trainmen	4,972,854 94	d 148,601 68
Train Supplies and Expenses	2,286,266 04	d 73,797 82
Signal and Interlocker Operation	685,215 21	39,849 60
Crossing Protection	1,543,816 75	17,190 64
Drawbridge Operation	56,594 75	3,517 26
Telegraph and Telephone Operation.	58,589 72	3,668 54
Stationery and Printing	155,638 26	d 29,204 25
Other Expenses	40,592 42	6,260 47
Operating Joint Tracks and Facilities	40,392 42	0,200 47
— Dr	30 071 16	2 127 60
— Dr	39,971 16	2,137 60
Operating Joint Tracks and Facilities	(0.002.76	2 (02 05
— Cr	60,203 76	2,603 85
Insurance	23,562 29	
Clearing Wrecks	63,881 25	d 39,659 05
Damage to Property	67,341 05	52,326 81
Damage to Live Stock on Right of		
Way	4,995 68	d 2,725 93
Loss and Damage — Freight	795,229 06	d 265,729 71
Loss and Damage — Baggage	5,902 72	1,729 52
Injuries to Persons	328,108 08	d 147,939 01
Total Transportation	\$35,744,052 12	d \$3,221,303 95
Ratio to Total Operating Revenues	(43.46%)	(2.08%)
4 Indicator decreases		

### Operating Expenses (Concluded)

	Year ended Dec. 31, 1949	Increase or Decrease
MISCELLANEOUS OPERATIONS Dining and Buffet Service	\$ 192,341 89 24,301 84 11 06	d \$ 119,890 07 d 2,878 49 d 5 74
Total Miscellaneous Operations . Ratio to Total Operating Revenues	\$ 216,654 79 (.26%)	d \$ 122,774 30 d (.10%)
General Salaries and Expenses of General Officers Salaries and Expenses of Clerks and Attendants General Office Supplies and Expenses Law Expenses Insurance Pensions and Gratuities Stationery and Printing Valuation Expenses Other Expenses General Joint Facilities — Dr.	\$ 226,455 36 2,242,030 08 160,749 64 203,590 65 704 99 311,214 57 67,573 04 36,737 08 117,955 01 25,168 50	\$ 22,484 18 30,730 50 d 1,687 47 39,055 26 d 95 37 d 12,063 17 2,428 20 d 853 30 d 14,461 03 4,148 69
Total General	\$ 3,392,178 92 (4.13%)	\$ 69,686 49 (.60%)
Total Operating Expenses Ratio to Total Operating Revenues	\$67,091,572 50 (81.58%)	d \$6,650,776 72 (3.27%)

d Indicates decrease.



20-ton motor truck crane removing old ballast for replacement at Winchester, Mass.

### Capital Stock and Long-Term Debt Outstanding

CAPITAL STOCK	Amount Outstanding		
Prior Preference Prior Preference Negotiable Receipts First Preferred Class A  " " B  " C  " " D  Preferred	\$ 23,136,100 0 2,400 0 18,860,000 0 7,648,800 0 7,917,100 0 4,327,000 0 65,000 0 3,149,800 0 39,505,100 0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
	\$104,611,300 0	00	-
Long-Term Debt		Amount Outstanding	
Income Mortgage "A	onds	\$ 25,000 00 1,237,000 00 56,833,400 00 902,000 00 3,065,000 00 27,130,500 00 290,000 00 \$89,482,900 00	) ) ) ) )
Lease and Purchase Agreements — Equip  Grand Total Long-Term Debt	ment	10,436,102 70 \$99,919,002 70	-

### Capital Stock Outstanding December 31, 1949 — Leased Roads

CAPITAL STOCK	Amount Outstanding	Dividend Rate (Paid as rental)	Owned, Held in Treasury or Insurance Fund		
Stony Brook	\$ 300,000 00 3,068,400 00 3,193,000 00	7% 6% 6%	\$ 38,700 00 958,900 00 445,600 00		
Total Capital Stock	\$6,561,400 00		\$1,443,200 00		

Cumulative Dividends Since †Jan. 1, 1932 — *O	Unpaid ct. 1, 1931	Amount in Hands of Public Owned, Deposited with Trustee, or Held in Treasury**
†\$126 00 " " 17, *\$ 91 25 " " 17, *\$146 00 " " 11, *\$127 75 " " 10,	903,140 00 3,024 00 186,116 25 167,248 00 106,941 25 891,117 50 53,381 25	\$ 22,939,000 00 2,400 00 18,834,100 00 7,648,800 00 a 7,911,500 00 4,323,900 00 65,000 00 3,149,800 00 39,472,800 00  \$ 197,100 00 25,900 00 5,600 00 3,100 00 32,300 00
		\$104,347,300 00 \$ 264,000 00
Date of Maturity	Rate	
July 1, 1950 May 1, 1955 July 1, 1960 April 1, 1961 September 1, 1967 July 1, 1970 October 1, 1955	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	\$ 10,000 00 1,237,000 00 54,526,900 00 897,000 00 2,424,000 00 24,248,000 00 290,000 00  \$ 15,000 00 \$ 5,000 00 \$ 641,000 00 2,882,500 00
Various	Various	\$ 83,632,900 00 10,436,102 70 \$5,850,000 00 \$ 94,069,002 70 \$5,850,000 00
		\$ 74,009,002 10 \$5,050,000 00

\*\* No interest.
a Includes 12 shares held for conversion of Concord & Montreal Railroad Stock.
b Deposited with and held by Trustee in Lieu of Mortgaged Property Sold, to release would

require cash payment at par. c Issued under Vermont Valley Railroad Mortgage dated October 1, 1940, assumed on December 31, 1949.

### Miles of Road Operated, December 31, 1949

Steam Roads	Owned	Leased	Total
Main Lines	877 68 610 14	137 20 4 74 82 23	1,014 88 614 88 82 23
Total Road Operated Second Track Third Track Other Tracks	1,487 82 478 25 8 06 890 85	224 17 81 17 7 69 99 91	1,711 99 559 42 15 75 990 76
Total Track Operated	2,864 98	412 94	3,277 92

a Includes trackage rights 14.48 miles b Includes trackage rights .99 mile.

SOME NEW
INDUSTRIAL
CONSTRUCTION
IN 1949
ON THE LINES OF
THE BOSTON AND MAINE





Avery & Saul Company, Steel Fabricators, West Cambridge.

### Additions and Betterments (Operating Property)—December 31, 1949

Road	TITLE ACCOUNT	Gross Expenditures	Property Retired	Net Capital Changes
1	Engineering	\$ 209,888 73	\$ 120,012 87	\$ 89,875 86
2	Land for Transportation Purposes	353,356 00		28,142 30
21/2	Other Right-of-Way Expenditures	1,592 00		938 00
3	Grading	1,505,347 49		1,038,898 01
5	Tunnels and Subways	50,399 12		50,399 12
6	Bridges, Trestles and Culverts .	701,413 23	289,586 25	411,826 98
8	Ties	241.834 12		68,934 20
9		781,389 74		223,236 06
10	Other Track Material	583,122 83		231,908 60
11	Ballast	115,719 53		2,985 59
12	Track Laying and Surfacing	240,670 70	183,961 97	56,708 73
13	Fences, Snowsheds and Signs	35,939 00	5 35,462 34	476 72
16	Station and Office Buildings	466,480 29		223,160 36
17	Roadway Buildings	15,696 4		31,943 57
18	Water Ctations	25,259 64		
	Water Stations			97,609 92
19	Fuel Stations	266,123 1		200,627 09
20	Shops and Enginehouses	215,156 6		74,210 22
26	Telegraph and Telephone Lines .	45,136 1	2 13,207 95	31,928 17
27	Signals and Interlockers	849,191 0	7 105,083 23	744,107 84
29	Power Plants	146 7		893 28
31	Power-Transmission Systems	61,809 7		58,575 70
35	Miscellaneous Structures	611 1		611 11
37	Roadway Machines	137,363 9		101,091 23
38	Roadway Small Tools	1,762 5	3 1,643 00	119 53
39	Public Improvements — Con-			
	struction	82,164 1	2 51,812 65	30,351 47
44	Shop Machinery	61,838 7		82,301 39
45	Power-Plant Machinery			59,119 77
43		89,137 5		
	Total Road	\$ 7,138,550 4	0 \$3,771,486 34	\$3,367,064 06
EQUIP	MENT			
51	Steam Locomotives	\$ 25,750 9	8 \$1,127,853 59	\$1,102,102 61
52	Other Locomotives	3,436,839 1		3,277,103 82
53		88,265 3		937,565 78
	Freight-Train Cars			
54	Passenger-Train Cars	128,762 9		441,820 13
57	Work Equipment	351,686 4		222,014 82
58	Miscellaneous Equipment	2,073 2	4 13,251 47	11,178 23
	Total Equipment	\$ 4,033,378 1	6 \$3,026,926 27	\$1,006,451 89
GENE	RAL EXPENDITURES			
72	General Officers and Clerks	\$ 22,594 3	1 \$ 12,992 02	\$ 9,602 29
-73	Law	7,124 2		77 23
74	Stationery and Printing	8,313 0		7,504 03
75	Taxes	7,718 1	0 / 000 00	3,640 10
	Taxes	102 415 0		
76	Interest during Construction	192,415 8		1,325 39
77	Other Expenditures — General .	3,879 7	7 2,720 00	1,159 7
	Total General Expenditures	\$ 242,045 2	7 \$ 218,736 46	\$ 23,308 8
	Totals (See Note)	\$11,413,973 8	3 * \$7,017,149 07	\$4,396,824 70

#### \* DISPOSITION OF CREDITS

Account No.			
701 — Road and Equipment Property — Equipment Converted			\$ 126,085 52
702½ — Accrued Depreciation — Road and Equipment — Owned Road			
708 — Cash — (Land, Buildings, Equipment, Rail and Track Fastenings Sold)			
716 — Material and Supplies — (Usable Material)			161,036 54
726 — Property Retired Chargeable to Operating Expenses			942,789 23
779 — Accrued Depreciation — Leased Property			239,195 60
531 — Operating Expenses			904,359 43
621 — Profit and Loss — Miscellaneous Debits			117,034 20

### Operating Statistics

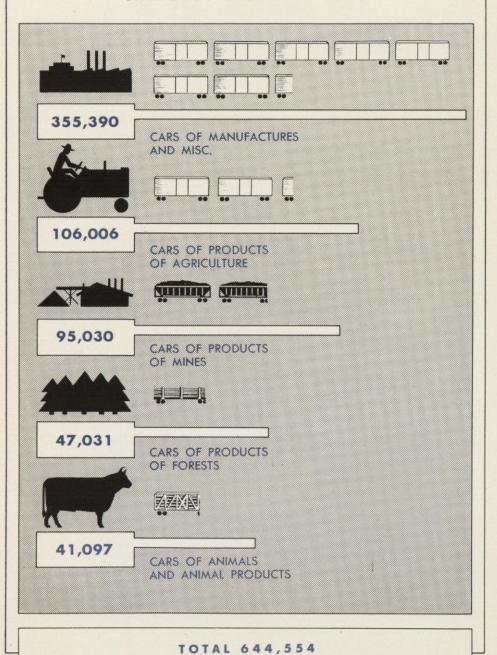
AVERAGE MILES OF ROAD OPERATED   Freight Service   1,723.07   22.61		Year Ended Dec. 31, 1949	Increase or Decrease
TRAIN MILEAGE Freight service (with locomotives) Passenger service (with locomotives) Passenger service (with locomotives) Passenger service (without locomotives) 268,048 7,549 Work service 116,321 47,076  Total train miles 9,991,222 889,294  * Locomotive Mileage Freight service 5,565,067 7343,165 Train switching 273,294 Yeard switching Yeard switching Yeard switching 12,755,372 Yeard switching Yeard Service Yeard Yeard Service Yeard Ye	Freight Service		
Freight service (with locomotives)	Total	1,734.42	22.61
* LOCOMOTIVE MILEAGE Freight service Passenger service 1	Freight service (with locomotives)	6,350,077 268,048	322,511 7,549
Freight service	Total train miles	9,991,222	889,294
CAR MILEAGE         Freight-Train Car Miles:         121,685,990         16,843,293           Empty         57,883,780         1,996,392           Caboose         3,370,891         482,951           Total freight-train car miles         182,940,661         19,322,636           Passenger-Train Car Miles:         18,563,847         1,575,598           Passenger coaches         18,563,847         266,365           Club, lounge, dining and observation cars         208,012         74,876           Business cars         10,085         1,659           Mail, express, and baggage cars, and combination cars other than passenger         15,514,956         396,619           Combination passenger cars (mail, express, or baggage with passenger)         4,351,172         143,970           Total passenger-train car miles         41,855,446         2,458,769           Total transportation service car miles         224,796,107         21,781,405           AVERAGES         Operating revenues per mile of road         \$47,415,84         \$6,177,97           Operating expenses per mile of road         2,873,33         1,833,91           Operating revenues per train mile         \$8,33         \$46           Operating expenses per train mile         50         27           Total freight cars per revenue tr	Freight service Passenger service Train switching Yard switching	6,565,067 273,294 2,214,468	343,165 22,836 356,070
Freight-Train Car Miles:         121,685,990         16,843,293           Empty         57,883,780         1,996,392           Caboose         3,370,891         482,951           Total freight-train car miles         182,940,661         19,322,636           Passenger-Train Car Miles:         18,563,847         1,578,598           Passenger coaches         3,207,374         266,965           Club, lounge, dining and observation cars         208,012         74,876           Business cars         10,085         1,659           Mail, express, and baggage cars, and combination cars other than passenger         15,514,956         396,619           Combination passenger cars (mail, express, or baggage with passenger)         4,351,172         143,970           Total passenger-train car miles         41,855,446         2,458,769           Total transportation service car miles         224,796,107         21,781,405           AVERAGES         Operating revenues per mile of road         \$47,415.84         \$6,177.97           Operating expenses per mile of road         2,873.33         1,833.91           Operating expenses per train mile         6,79         0,9           Net railway operating income per train mile         50         27           Total freight cars per revenue train mile	Total locomotive miles	12,755,372	1,367,046
Passenger Train Car Miles:       18,563,847       1,578,598         Sleeping and parlor cars       3,207,374       266,365         Club, lounge, dining and observation cars       208,012       74,876         Business cars       10,085       1,659         Mail, express, and baggage cars, and combination cars other than passenger       15,514,956       396,619         Combination passenger cars (mail, express, or baggage with passenger)       41,855,446       2,458,769         Total passenger-train car miles       41,855,446       2,458,769         Total transportation service car miles       224,796,107       21,781,405         AVERAGES       Operating revenues per mile of road       \$47,415.84       \$6,177.97         Operating expenses per mile of road       38,682.43       3,287.46         Net railway operating income per mile of road       2,873.33       1,833.91         Operating revenues per train mile       \$8.33       46         Operating expenses per train mile       6.79       .09         Net railway operating income per train mile       55.14       2.50         Loaded freight cars per revenue train mile       37.37       .61         Empty freight cars per revenue train mile       17.77       1.88	Freight-Train Car Miles: Loaded	57,883,780	1,996,392
Passenger coaches   18,563,847   3,207,374   266,365	Total freight-train car miles	182,940,661	19,322,636
with passenger)       4,351,172       143,970         Total passenger-train car miles       41,855,446       2,458,769         Total transportation service car miles       224,796,107       21,781,405         AVERAGES       Operating revenues per mile of road       \$47,415.84       \$6,177.97         Operating expenses per mile of road       38,682.43       3,287.46         Net railway operating income per mile of road       2,873.33       1,833.91         Operating revenues per train mile       \$8.33       46         Operating expenses per train mile       6.79       .09         Net railway operating income per train mile       .50       .27         Total freight cars per revenue train mile       55.14       2.50         Loaded freight cars per revenue train mile       37.37       .61         Empty freight cars per revenue train mile       17.77       1.88	Passenger coaches Sleeping and parlor cars Club, lounge, dining and observation cars Business cars Mail, express, and baggage cars, and combination cars other than passenger Combination passenger cars (mail, express, or baggage	3,207,374 208,012 10,085	266,365 74,876 1,659
Total transportation service car miles 224,796,107 21,781,405  AVERAGES Operating revenues per mile of road \$47,415.84 \$6,177.97 Operating expenses per mile of road 38,682.43 3,287.46 Net railway operating income per mile of road 2,873.33 1,833.91  Operating revenues per train mile \$8.33 \$.46 Operating expenses per train mile 6.79 0.9 Net railway operating income per train mile 55.14 2.50 Loaded freight cars per revenue train mile 37.37 61 Empty freight cars per revenue train mile 17.77 1.88	with passenger)	4,351,172	143,970
AVERAGES         \$47,415.84         \$6,177.97           Operating revenues per mile of road         38,682.43         3,287.46           Operating expenses per mile of road         2,873.33         1,833.91           Operating revenues per train mile         \$8.33         \$.46           Operating expenses per train mile         6.79         .09           Net railway operating income per train mile         .50         .27           Total freight cars per revenue train mile         55.14         2.50           Loaded freight cars per revenue train mile         37.37         .61           Empty freight cars per revenue train mile         17.77         1.88		41,855,446	2,458,769
Operating revenues per mile of road	Total transportation service car miles	224,796,107	21,781,405
Operating expenses per train mile	Operating revenues per mile of road	38,682.43	3,287.46
Loaded freight cars per revenue train mile	Operating expenses per train mile	6.79	.09
Total passenger cars per train mile 6.32 .06	Loaded freight cars per revenue train mile	37.37	. 61
	Total passenger cars per train mile	6.32	.06

<sup>\*</sup> Includes 7,919,934 Diesel Locomotive Miles. Italics indicate decrease.

### Traffic Statistics

	Year Ended Dec. 31, 1949	Increase or Decrease
Freight Revenue	\$ 61,721,866 18,701,832 1,172,141	\$ 9,115,010 4,343,658 284,915
Total tons of freight carried	19,873.973	4,628,573
Tons of revenue freight carried one mile	3,037,496,906 89,539.502	619,875,763 28,500,678
Total tons of freight carried one mile	3,127,036,408	648,376.441
Passenger Passenger Revenue:  Monthly commutation ticket passengers All other commutation ticket passengers Single fare ticket passengers (not including interline) Interline ticket passengers.	\$ 1,228,053.07 1,703,290.12 6,152,117.17 3,949,572.47	8 26,172.66 43,823.82 1,203,017.46 557,625.51
Total passenger revenue	\$13,033,032.83	\$1,830,639.45
Number of Passengers Carried: Monthly commutation ticket passengers All other commutation ticket passengers Single fare ticket passengers (not including interline) Interline ticket passengers.	4,286,573 7,851,644 7,447,233 1,328,279	128,236 295,589 1,971,240 365,272
Total number of passengers carried	20,913,729	2,760,337
Number of Passengers carried one mile:  Monthly commutation ticket passengers All other commutation ticket passengers Single fare ticket passengers (not including interline) Interline ticket passengers.	103,635,661 79,848,294 218,255,980 127,346,759	2,176,486 2,235,024 64,946,649 30,927,910
Total number of passengers carried one mile	529,086.694	100,286,069
Number of passengers to and from Boston, including monthly ticket passengers	20,051,429	1,964,862
AVERAGES Freight: Miles hauled — revenue freight Tons of revenue freight per train mile Tons of revenue freight per loaded car mile Revenue per ton of freight Revenue per ton per mile	\$ 3.30031 2.032 \$ 3.30031 2.032 \$ 18.952 50.722 25.30 79.95 20.25 62.32 1.185 2.133 2.819 3.101 2.463 49.892	3.72 37.73 1.44 \$ .22653 .095 \$ .157 .413 1.28 10.63 2.14 .46 
Total passenger service train revenue per train mile (cents)	\$ 1.197	\$ 1.659

#### CARLOADS HAULED IN 1949



## 10 YEARS PROGRESS IN OPERATING EFFICIENCY FREIGHT SERVICE

				%
		1949	1940	Change
Ave. Gross Tons per Train		2,344	1,973	18.8
Ave. Miles per Train Hour		15.8	14.2	11.3
Gross Ton Miles per Train Hour (A)		37,064	27,996	32.4
Ave. Net Tons per Train Mile		962	736	30.7
Tons per Loaded Car		25.7	21.5	19.5
Net Ton Miles per Car per Day .		790	560	41.1
Miles per Car per Day		45.4	38.7	17.3
Miles per Locomotive per Day		87.9	70.3	25.0
Ratio of Locomotive Miles				
to Train Miles		1.079	1.213	d11.0
Per Cent Freight Cars				
Unserviceable (B) .		3.2	4.8	d33.3
Per Cent Freight Locomotives				
Unserviceable (B) .		12.7	26.9	d52.8

In 1940 all gross ton miles were handled by steam power, but in 1949 7.8% were handled by steam and 92.2% by Diesel Power.

If the gross ton miles produced by Diesels in 1949 had been produced by steam locomotives at the 1940 unit of coal consumption per 1000 Gross Ton Miles and at present-day coal prices, the fuel cost would have been about \$2,100,000 more than actually paid for Diesel oil in 1949.

- (A) Train hour production is the average train load times the average train speed.
- (B) Undergoing or awaiting repairs or possible retirement.





AAILROAD